

INDIAN INSTITUTE OF TECHNOLOGY MADRAS

ENGINEERING UNIT

CHENNAI - 600 036

Tender No: 99 / 2012 – 13 / Civil.

Name of work Annual Maintenance Contract for

Plumbing works in Water Supply Sub-

division for the year 2013-14.

Approximate Value put to Tender Rs. 24.28 Lakhs

(for reference only)

Earnest Money Deposit Rs. 48,560/-

Cost of Tender Schedule Rs. 500.00

Vat @ 5% Rs. 25.00

Rs. 525.00

Last date and Time of Receipt Date: 10 - 04 – 2013

Time: 3.00 PM.

Date and Time of Opening Date: 10- 04 - 2013

Time: 3.10 PM.

Certified that the tender document contains 41 (Forty one pages) only and no alterations and additions have been made by me / us in the tender document.

Signature of the Contractor

Executive Engineer (Civil)

INDIAN INSTITUTE OF TECHNOLOGY MADRAS

ENGINEERING UNIT CHENNAI – 600 036

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Certified that the tender document contains 41 (Forty One pages) only and no alterations and additions have been made by me / us in the tender document.

Signature of the Contractor

INDIAN INSTITUTE OF TECHNOLOGY MADRAS CHENNAI – 600 036

TENDER NOTICE NO.:- 99 / 2012 - 13

Sealed item rate Tenders are invited by the EXECUTIVE ENGINEER (CIVIL), Indian Institute of Technology Madras, Chennai – 600 036, from the **Registered Contractors of IIT**Madras (Civil – Class: I to IV) in item rate agreement form up to 3-00 P.M on 10 - 04- 2013 for the work of "Annual Maintenance Contract for Plumbing works in Water Supply Subdivision for the year 2012-13.".

Approximate value of items put to tender is **Rs. 24.28 Lakhs**. This is only for general guidance. The Tender can be downloaded from the IIT Madras web site **(www.litm.ac.in/tendernotices)**.

Tenders should be accompanied by two crossed Demand Drafts drawn in favour of IITM Chennai - 600 036 for Rs. 48,560/- towards Earnest Money Deposit and Rs. 525/- (Non - Refundable) towards cost of tender schedule. Tenders received without Earnest Money Deposit and cost of tender schedule will be summarily rejected.

Completed Tenders received at Office of Executive Engineer (Civil) in time and will be opened after 3.10 P.M on 10 - 04- 2013 in the presence of Tenderers or their authorized agents.

Executive Engineer (Civil)

INDIAN INSTITUTE OF TECHNOLOGY MADRAS

ENGINEERING UNIT

CHENNAI - 600 036

Item Rate Tender & Contract for Works

	tenance Contract for Plumbing works in Water Supp for the year 2013-14."
(i) To be submitted by	hours on
(ii) To be opened in presence of tenderer on in the	s who may be present at hours office of
	TENDER
Specifications applicable, Drawings & Contract, Clauses of Contract, Special C	notice inviting tender, schedule, A, B, C, D, E & Designs, General Rules and Directions, Conditions onditions, Schedule of Rates & other documents and ruled all other contents in the tender document for the work.
Schedule 'F', viz., and in accordance in instructions in writing referred to in Rule-	f the work specified for the IIT within the time specified all respects with the specifications, designs, drawings a 1 of General Rules and Directions and in Clause 11 of t materials as are provided for, by, and in respects s applicable.
We agree to keep the tender open for Nin not to make any modifications in its terms	nety (90) days from the due date of submission thereof a and conditions.
of a scheduled bank / fixed deposit receip as earnest money. If I/We, fail to furnish period, I/we agree that the said office so liberty to forfeit the said earnest mone specified, I/we agree that IITM or his succeived remedy available in law, be at liberty guarantee absolutely, otherwise the said deposit to execute all the works referred contained or referred to therein and to can of the percentage mentioned in Schedu	ed in cash / receipt treasury challan / deposit at call recept of a scheduled bank / demand draft of a scheduled bank in the prescribed performance guarantee within prescribe hall without prejudice to any other right or remedy, be y absolutely. Further, if I/we fail to commence work dessors in office shall without prejudice to any other right to forfeit the said earnest money and the performant earnest money shall be retained by him towards secure to in the tender documents upon the terms and conditionary out such deviations as may be ordered, upto maximule 'F' and those in excess of that limit at the rates to ion contained in Clause 12.2 and 12.3 of the tender form.
connected with the work as secret / confiderived there from to any person other	eat the tender documents drawings and other recoridential documents and shall not communicate information than a person to whom I/we am / are authorized ation in any manner prejudicial to the safety of the State.
Date	Signature of Contractor
	Postal Address
Witness: Address: Occupation:	

ACCEPTANCE

The above tender (as modified by you as prov	vided in the letters mentioned hereunder) is accepted
by me for an on behalf of the President	of India for a sum of Rs.
(Rupees	
)	
The letters referred to below shall form part of	this contract Agreement:
a)	
b)	
c)	
	For & on behalf of the President of India
	Signature
	Designation
Date	

General Rules and Directions

- 1. The tender must be signed by the person / persons competent to sign as indicated in Technical bid. Same stipulations will also apply in the case of Receipt for payments made on account of work to the successful Contractor who has signed the Contract Agreement.
- 2. This form will state the work to be carried out, as well the date for submitting and opening tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tender, and the amount of the security deposit to be deposited by the successful tenderer and the percentage, if any to be deducted from bills. Copies of the specifications, designs and drawings and any other documents required in connection with the work signed for the purpose of identifications by the officer inviting tender, shall also be open for inspection by the contractor at the office of officer the inviting tender, during office hours.
- 3. Any person who submits a tender shall fill up the form, stating at what item rate & amount he is willing to undertake the full work. Only one rate shall be given in words & figures for each item. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other condition of any sort including conditional rebates, will be summarily rejected. Tender shall have the name and number of the work to which they refer, written on the envelopes. Amount must be quoted in full rupees by ignoring fifty paise and considering more than fifty paise as rupee one.
- 4. The officer inviting tender or his duly authorized assistant will open Financial Bids of those tenderers whose, Technical Bids have been found acceptable, in the presence, of any intending Contractors or their authorized agents who may be present at the time, and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the Earnest Money forwarded therewith shall thereupon be given to the Contractor. In the event of a tender being prejected, the Earnest Money forwarded with such unaccepted tender shall thereupon be returned to the Contractor remitting the same, without any interest.
- 5. The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
- 6. The memorandum of work tendered for and the schedule of materials to be supplied by the institute and their issue-rates, shall be filled and completed in the office of the officer inviting tender before the tender form is published. If a form is published to an intending tenderer without having been so filled in and incomplete, he shall request the officer to have this done before he completes and delivers his tender.
- 7. The tenderers shall sign a declaration under the Official Secret Act, 1923, for maintaining secrecy of the tender documents, drawings or other records connected with the work given to them.
- 8. In the case of item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is founds, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct. If the amount of an item is not worked out by the contractor or it dose not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rates quoted be the contractor, will, unless otherwise proved, be taken as correct and not the amount.
- 9. In the case of any tender where unit rate of any item/items appear unrealistic, such tender will be considered as unbalanced and in case the tendered is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.

- 10. All rates shall be quoted on the tender form. The amount for each item should be worked out and the requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word 'Rs' should be written before the figure of 'Rupees' and the work 'P 'after the decimal figures, eg.' Rs 2.15P' and in case of words, the word, "Rupees" should precede and the work 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only', it should invariably be up to two decimal places. While quoting each rate in schedule of tender, the word 'only' should be written closely following the rate and it should not be written in the next line.
- 11. a. The Contractor, whose tender is accepted, will be required to furnish performance guarantee of 5% (five percent) of the tendered amount within specified period. This guarantee shall be in the form of Government Securities or fixed deposit receipt of any scheduled bank, guarantee bonds of any scheduled bank or state bank of India.
 - b. The contractor whose tender is accepted will be required to furnish by way of Security Deposit for the fulfillment of his contract, an amount equal to 5 % of the tendered value of the work. The Security deposit will be collected by deductions from the running bill of the contractor at the rates mentioned above and the earnest money if deposited in cash at the time of tender will be treated as a part of this Security Deposit. The SD amount will also be accepted in cash or in the shape of Government securities. Fixed deposit receipt of a scheduled bank or State bank of India will also be accepted for this purpose. Provided confirmatory advice is enclosed.

On acceptance of the tender, the name of the accredited representative (s) of the Contractor who would be responsible for taking instructions from the Engineer in Charge shall be communicated in writing to the Engineer in Charge.

- 12. Sales-tax (VAT), service tax, purchase tax, turnover tax, Service tax, works contract tax or any other tax on material, labour and works in respect of this contract shall be payable by the contractor and IITM will not entertain any claim whatsoever in respect of the same.
- 13. The Contractor shall give a list of both gazetted and non-gazetted IITM employees related to him.
- 14. The tender for the work shall not be witnessed by a Contractor or Contractors who himself / themselves has/have tendered for the same work. Failure to observe this condition would render tenders of the Contractor tendering, as well as witnessing the tender, liable to summary rejection.
- 15. The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time. If he fails to do so, his failure will be a breach of the contract and the Executive Engineer (Civil) may in his discretion, without prejudice to any other right or remedy available in low, cancel the contract. The contractor shall also be liable for any pecuniary liability on account of any violation by him of the provisions of the said Act.

Signature of Contractor

Executive Engineer (Civil)

CONDITIONS OF CONTRACT

- 1. The Contract means the documents forming the tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of the IIT and the Contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-in-charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.
- 2. In the contract, the following expressions shall, unless context otherwise requires, have the meanings, hereby respectively assigned to them:
 - i) The expression works or work shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional.
 - ii) The Site shall mean the land/or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
 - iii) The contractor shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company.
 - iv) The Engineer-in-charge means the Engineer officer who shall supervise and be in-charge of the work and who shall sign the contract on behalf of IIT as mentioned in Schedule 'F' hereunder.
 - v) Accepting Authority shall mean the authority mentioned in Schedule 'F'.
 - vi) Excepted Risk are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of IITM, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Accepting Authority or causes solely due to use or occupation by IITM of the part of the works in respect of which a certificate of completion has been issued or a caused solely due to IITM faulty design of works.
 - vii) Market Rate shall be the rate as decided by the Engineer-in-charge on the basis of the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned in Schedule 'F' to cover, all overheads and profits.
 - viii) Schedules(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard schedule of Rates of the CPWD mentioned is schedule 'F' hereunder, with the amendments thereto issued upto the date of receipt of the tender.
 - ix) Department means IITM which invites tenders.
 - x) District specification means the specifications followed by the state of Tamil Nadu in the area where the work is to be executed.
 - xi) Tendered value means the value of the entire work as stipulated in the letter of award.

- 3. Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.
- 4. Headings and marginal notes to these General Conditions of contract shall not be deemed to form part thereof be taken into consideration in the interpretation or construction thereof or of the contract.
- 5. The contractor shall be furnished, free of cost one certified copy of the contract documents except standard specification, Schedule of Rates and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of his contract.
- 6. The work to be carried out under the contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipments and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The descriptions given in the Schedule of quantities (Schedule-A) shall, unless otherwise states, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full ands entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.
- 7. The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the schedule of Quantities, which rates and prices shall except as otherwise provided cover all his obligation under the contract and all matters and things necessary for the proper completion and maintenance of the works.
- 8. The several documents forming the contact are to be taken as mutually explanatory of one another, detailed drawings being following in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General conditions.
- 8.1 In the case of discrepancy between the schedule of Quantities, the specifications and/or the Drawings, the following order of preference shall be observed.
 - i) Description of Schedule of Quantities.
 - ii) Particular Specification and special condition, if any
 - iii) Drawings.
 - iv) C.P.W.D Specifications
 - v) Indian Standard specifications of B.I.S.
- 8.2 If these are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the documents and his decision shall be final and binding on the contractor.
- 8.3 Any error in description, quantity or rate in schedule of Quantities or any omission there from shall not vitiate the contractor or release the contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.
- 9. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall within 15 days from the stipulated date of start of the work sign the contract consisting of:-

- i) The notice inviting tender, all the documents including drawings, if any, forming the tender as issued at the time invitation of tender and acceptance thereof together with any correspondence leading thereto.
- ii) Standard C.P.W.D Form as mentioned in Schedule 'F' consisting of:
 - a) Various standard clauses with corrections upto the date stipulated in schedule 'F' along with annexure thereto.
 - b) C.P.W.D Safety code.
 - Model Rules for the protection of health, sanitary arrangements for workers employed by CPWD of its contractors.
 - d) CPWD contractor's Labour Regulations.
 - e) List of Acts omissions for which fines can be imposed.

ADDITIONAL SPECIFICATIONS

The additional specifications given below are not substitute to CPWD specifications or IS specifications. These shall be read along with CPWD specifications or IS specifications.

GENERAL

- 1. The work shall be carried out using metric dimensions only and shall be measured and paid in metric dimensions. F.P.S. units, if any, mentioned in drawings etc are for guidance only.
- 2. Wherever any reference to any Indian Standard Specification occurs in the documents relating to this contract the same shall be inclusive of all amendments issued there to or revision there of if any, up to the date of receipt of tenders.
- 3. Unless otherwise specified in the schedule of quantities the rates for the various items are for all heights and locations.
- 4. Unless otherwise specified in the schedule of quantities the rate for the items of the work shall be considered as inclusive of pumping out or bailing out water, if required, for which no extra payments will be made. This will include water encountered form any source, such as rains, floods, sub-soil water table being high or due to any other cause whatsoever.
- 5. The tender shall study the item description, the relevant drawings and satisfy himself the item of work to be carried

PROFORMA OF SCHEDULE

SCHEDULE - 'A'

The Bill of Quantities enclosed separately along with Tender (Financial bid)

SCHEDULE - 'B'

NO MATERIAL SHALL BE ISSUED TO THE CONTRACTOR BY IITM.

SCHEDULE - 'C'

Schedule of tools and plants proposed to be hired to the contractor.

NO TOOLS AND PLANTS SHALL BE HIRED TO THE CONTRATOR.

SCHEDULE - 'D'

Extra schedules for specific requirements / documents for the work, if any.

- 1. No labour shall be permitted to stay in the campus
- 2. All debris obtained from dismantling the existing structure should be removed from site of work before start of work.

SCHEDULE - 'E'

Schedule of component of cement, steel other materials, labour etc for price escalation.

CLAUSE - 10 CC

Clause 10 CC of General Conditions of Contract is not applicable to this work.

SCHEDULE - 'F'

Reference to General conditions of contract

Name of work : "Annual Maintenance Contract for

Plumbing works in Water Supply Sub-

division for the year 2013-14."

Estimated cost or work : Rs. 24.28 Lakhs

Earnest Money Deposit : Rs. 48,560/-.

Security Deposit : 5% of tendered value (inclusive of EMD).

Performance Guarantee : 5% of tendered value.

General Rules and Directions:

Officer inviting tender : Executive Engineer (Civil), IITM

Maximum percentage for quantity of items work

to be executed beyond which rates are to be : See below

determined in accordance with clause 12.2 and 12.3.

Definition

2 (v) Engineer in charge Executive Engineer (Civil).

2 (viii) Accepting authority Director, IIT Madras.

2 (x) Percentage on cost of material and labour to cover all overheads and profits.

2 (xi) Standard schedule of rates CPWD DSR 2012.

2 (xii) Department IIT Madras.

9 (ii) Standard CPWD contract form CPWD 8 as modified and Corrected up to till date.

Clause 1

Time allowed for submission of Performance
 Guarantee from the date of issue of letter of acceptance in days.
 Time allowed for submission of Performance
 7 (Seven) Days

2. Maximum allowable extension beyond the 7 (Seven) Days period provided above

Clause 2

Authority for fixing compensation under clause 2. Executive Engineer (Civil).

Clause 2a

Whether clause 2a shall be applicable Yes applicable.

Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start 15 Days.

Time allowed for execution of work 1 Year.

Authority to give fair and reasonable Executive Engineer (Civil) Extension of work for completion of work

Clause 7

Gross work to be done together with net payment/ adjustment of advances for material collected, if any, since the last such payments for being eligible to interim payment.

Rs. 1,50,000/-

Clause 10 CC

Clause 10 CC is not applicable to this work

Clause 11

Specification to be followed for execution of work

Particular specifications CPWD Specifications IS codes Manufacturer's specifications General engineering practice

Clause 12.2 & 12.3

Deviation limit beyond which clauses 12.2 & 12.3 shall apply for building works (Excluding foundation) 50%

Clause 12.5

Deviation limit beyond which clauses 12.2 &12.3 shall apply for foundation work

100%

Clause 16

Competent Authority for Deciding reduced rates.

Executive Engineer (Civil) IITM

....

Clause 36(i)

Designation Minimum qualification and experience required		Discipline	Rate of recovery per month
Technical Representatives	Graduate (fresh candidate) or Diploma Engineer with 5 years experience - 1 No.	Civil Engineering	Rs. 15,000/-

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers

Clause 42

Clause 42 is not applicable to this work

CLAUSES OF CONTRACT ADDENDA & CORRIGENDA (A & C)

Settlement of Disputes & Arbitration

Except where otherwise provided in the contract all question and disputes relating to the meaning of the specifications, designs, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders of these conditions or otherwise concerning the works or the execution or failure to executes the same whether arising during the progress of work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned herein after.

i) If the Contractor considers any work demanded of him to be outside the requirements of the contract, or disputed any drawings, record or decision given in writing by the Engineer-incharge or any matter in connection with or arising out of the Contract or carrying out of the work, to be unacceptable, he shall promptly within 15 days request the Executive Engineer (Civil) in writing for written instruction or decision. Thereupon, the Executive Engineer (Civil) shall give his written instructions or decisions within a period of one month from the receipt of the contractor's letter.

If the Executive Engineer (Civil) fails to give his instructions or decisions in writing within the aforesaid period or if the Contractor is dissatisfied with the instructions or decision of the Executive Engineer (Civil), the Contractor may, within 15 days of the receipt of Executive Engineer (Civil)'s decision appeal to the Chairman (Engineering Unit), IITM who shall afford an opportunity to the Contractor to be heard, if the mater so desires and to offer evidence in support of his appeal. The Chairman (Engineering Unit), IITM shall give his decision within 30 days of receipt of Contractor's appeal.

- ii) If the Contractor is dissatisfied with the decision of the Chairman (Engineering Unit), the Contractor shall within a period of 15 days of the receipt of the Chairman's decision appeal to the Director, IITM who shall afford an opportunity to the Contractor to be heard, if the mater so desires and to offer evidence in support of his appeal. The Director, IITM shall give his decision within 30 days of receipt of Contractor's appeal.
- iii) If the contractor is dissatisfied with the decision of the Director IITM, he shall, with in 30 days of the receipt of the decision shall give notice to the Director IITM for appointment of an arbitrator to adjudicate his claims, failing which the said decision of the Director, IITM shall be final and binding on the contractor.
- iv) Except where the decision has become final, binding and conclusive in terms of Sub para (iii) above, disputes or difference shall be referred for adjudication through a sole arbitrator appointed by the Director, IITM. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid. Such person shall proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Director, IITM of the appeal.

It is also a term of this contract that no person other than a person appointed by such Director, IITM, as aforesaid should act as arbitrator.

It is also a term of this Contract that if the Contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 120 days of receiving the intimation from the Engineer-in-charge that the final bill is ready for payment, the claim of the Contractor shall be deemed to have been waived and absolutely barred and IITM shall be discharged and released of all liabilities under the Contract in respect of these claims.

The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act 1996 (26 of 1996) or any statutory modifications or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is also term of this Contract that the arbitrator shall adjudicate on only such disputed as are referred to him by the Director, IITM and give separate award against each dispute and claim referred to him and in all cases where the total amount of the claims by any party exceeds Rs.1,00,000/- the arbitrator shall give reasons for the award.

It is also a term of the Contract that if any fees are payable to the arbitrator, these shall be paid equally by both the parties.

It is also a term of the Contract that the arbitrator shall be deemed to have entered on the reference on the date of issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

v) Page 55 – Claus 37 "Levy / Taxes Payable by Contractor"

Para (i) shall be substituted as under

"Sales tax including VAT if any or any other tax on materials as well as on Labour and Works in respect of this Contract shall be payable by the Contractor and IITM shall not entertain any claim whatsoever in this respect."

FORM OF PERFORMANCE SECURITY (GUARANTEE) BANK GUARANTEE BOND

In consideration of the Indian Institute of Technology Madras (hereinafter called "The Institute") Having offered to accept the terms and conditions of the proposed agreement between
1) We(Indicate the name of the Bank) (Hereinafter referred to as "the Bank") hereby Undertake to pay to the Institute an amount not exceeding Rs(Rupeesonly) on demand by the Institute.
2) Wedo hereby undertake to pay the amounts due and payable under this Guarantee without any demure, merely on a demand from the Institute stating that the amount claimed is required to that recoveries due or likely to be due from the contractor (s). Any such demand on the Bank shall be conclusive as regard the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs(Rupeesonly)
3) We, the said bank further undertake to pay to IITM any money so demanded notwithstanding any dispute or disputes raised by the contractor (s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present guarantee being absolute and unequivocal. he payment so made by us under this bond shall be a valid discharge of our liability payment therein under and the contractor (s) shall have no claim against us for making such payment.
4) We(Indicate the name of the bank)further agree that the guarantee here in Contained shall remain in full force and effect during the period that would be taken for the said performance of the said agreement and that it shall continue to be enforceable till all the dues of the Institute under or by virtue of the said agreement have been fully paid and claims satisfied or discharged or till Engineer-in-charge on behalf of the Institute certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor (s) and accordingly discharges this guarantee.
5) We(Indicate the name of the Bank)further agree with the Institute that the Institute shall have the fullest liberty without our consent without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Institute against the said contractor (s) and to forebear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor (s) or for any forbearance, act of omission on the part of the Institute on any indulgence by the Institute to the said contractor (s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6) This guarantee will not be discharged due to the change in the constitution of the bank or the contractor (s).
7) We(Indicate the name of the Bank)lastly undertake not to revoke this Guarantee except with the previous consent of the Institute in writing.
8) This guarantee shall be valid up tounless extended on demand by Institute. Notwithstanding anything mentioned above, our liabilities under this guarantee is restricted to Rs (Rupees) and unless a claim of writing is lodged with us within six month of the date of expiry or extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharge.

Dated the......day of......for.....(Indicate the name of the Bank)

FORM OF GUARANTEE BOND FOR EMD

In consideration of the Indian Institute of Technology Madras (hereinafter called "The Institute") Having offered to accept the terms and conditions of the proposed tender for the work of the indian institute. In the indian institute of Technology Madras (hereinafter called "The Institute") Having offered to accept the terms and conditions of the proposed tender for the work of the institute of Technology Madras (hereinafter called "The Institute") Having offered to accept the terms and conditions of the proposed tender for the work of the Institute of Technology Madras (hereinafter called "The Institute") Having offered to accept the terms and conditions of the proposed tender for the work of the Institute of Technology Madras (hereinafter called "The Institute") Having offered to accept the terms and conditions of the proposed tender for the work of the Institute of Technology Madras (hereinafter called "The Institute") Having offered to accept the terms and conditions of the proposed tender for the work of the Institute of Technology Madras (hereinafter called "The Institute") Having agreed to the Institute of Technology Madras (hereinafter called "The Institute") Having agreed to the Institute of Technology Madras (hereinafter called "The Institute") Having agreed to the Institute of Technology Madras (hereinafter called "The Institute") Having agreed to the Institute of Technology Madras (hereinafter called "The Institute") Having agreed to the Institute of Technology Madras (hereinafter called "The Institute") Having agreed to the Institute of Technology Madras (hereinafter called "The Institute") Having agreed to the Institute of Technology Madras (hereinafter called "The Institute") Having agreed to the Institute of Technology Madras (hereinafter called "The Institute") Having agreed to the Institute of Technology Madras (hereinafter called "The Institute") Having agreed to the Institute of Technology Madras (hereinafter called "The Institute") Having agreed to the Institute of Technology Madras (herein
production of a irrevocable bank Guarantee for Rs(Rupeesonly) as security from the contractor (s) for compliance of his obligations in accordance with the terms and condition in the tender.
1) We(Indicate the name of the Bank)(hereinafter referred to as "the Bank") hereby undertake to pay to the Institute an amount not exceeding Rs(Rupeesonly) on demand by the Institute.
2) Wedo hereby undertake to pay the amounts due and payable under this Guarantee without any demure, merely on a demand from the Institute stating that the amount claimed is required to that recoveries due or likely to be due from the contractor (s). Any such demand on the Bank shall be conclusive as regard the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs
3) We, the said bank further undertake to pay to IITM any money so demanded notwithstanding any dispute or disputes raised by the contractor (s) in any suit or proceeding pending before any court of Tribunal relating thereto, our liability under this present guarantee being absolute and unequivocal.
The payment so made by us under this bond shall be a valid discharge of our liability payment therein under and the contractor (s) shall have no claim against us for making such payment.
4) We(indicate the name of the bank)further agree that the guarantee herein Contained shall remain in full force during the SIX months period .
5) We(indicate the name of the bank)further agree with the Institute that the Institute shall have the fullest liberty without our consent without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Institute against the said contractor (s) and to forebear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor (s) or for any forbearance, act of omission on the part of the Institute on any indulgence by the Institute to the said contractor (s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6) This guarantee will not be discharged due to the change in the constitution of the bank or the contractor (s).
7) We(indicate the name of the bank)lastly undertake not to revoke this Guarantee except with the previous consent of the Institute in writing.
8) This guarantee shall be valid up to SIX months unless extended on demand by Institute Notwithstanding anything mentioned above, our liabilities under this guarantee is restricted to Rs (Rupees) and unless a claim of writing is lodged with us within six month of the date of expiry or extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharge.
Dated theday offor(Indicate the name of the Bank)

ADDITIONAL CONDITIONS - I

- 1. The contractor shall make arrangement for obtaining electric connections if required and make necessary payments for electrical consumption at the rate of Rs. 10.50/- per unit.
- Other agencies doing works related with this project will also simultaneously execute the works and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, openings etc, for laying/burying in the work of pipes, cable, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for other agencies. Conduits for electrical wiring/cables will be laid in a way that they leave enough space for concreting and do not adversely affect the structural members. Nothing extra over the agreement rates shall be paid for the same.
- 3. Some restrictions may be imposed by the security staff etc. on the working and on movement of labour, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra hall be payable on this account.
- 4. (a) The building work will be carried out in the manner complying in all respects with the requirements of relevant bye-laws of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-Charge and nothing extra will be paid of this account.
 - (b) The work of water supply, internal sanitary installations and drainage work etc. shall be carried out as per local Municipal Corporation or such local body-bye-laws and the contractor shall produce necessary completion certificate from such authorities after completion of the work, if required.
 - (c) Water tanks, taps sanitary, water supply an drainage pipes, fitting and accessories should conform to bye-laws and specification of the Municipal Body/Corporation where CPWD specifications are not available. The contractor should engage licensed plumbers for the work and get the materials (fixtures/fittings) tested by the Municipal Body/Corporation authorities wherever required at his own cost.
 - (d) The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rule and regulations and pay all fees and charge, which he may be liable.
- 5. The contractor shall take instructions from the Engineer-in-Charge for stacking of materials in any place. No excavated earth or building materials shall be stacked on areas where other buildings, roads, services compound walls are to be constructed.
- 6. Construction labour shall not be permitted (except staff for watch and ward) to stay inside the campus. The contractor has to arrange for necessary photo identity passes for the labour for entry in to the campus. The labour movement should be restricted to the areas where work is carried out.

ADDITIONAL CONDITIONS - II

2.0 AGREEMENT

Agreement shall be drawn with the successful Tenderer as per General Conditions of Contract for CPWD works. This document is a priced publication and interested tenderers may purchase and study the various clauses before submitting the tender.

3.0 TIME FOR COMPLETION OF WORK

The time allowed for carrying out the work will be **1 Year** from the 15th day after the date of written order to commence the work or from the first day of handing over the site, whichever is later, in accordance with the phasing if any indicated in the Tender documents.

4.0 AVAILABILITY OF SITE

The site for the work is available.

6.0 CLARIFICATIONS ON TENDER DOCUMENTS

A prospective Tenderer requiring any clarification on the Tender Document may notify Executive Engineer (Civil), IITM at Chennai. The Executive Engineer (Civil) will respond to any request for clarification which he receives earlier than 15 days prior to the deadline for submission of Tenders. Copies of the response shall be forwarded who have attended the meeting.

9. EARNEST MONEY

The Tender should be accompanied by Earnest Money for an amount of Rs 48,560/(Rupees Forty Eight Thousand and Five Hundred Sixty only). The EMD shall be paid in the form of Demand Draft drawn in favor of IITM Chennai – 36 on any Scheduled Bank payable at Chennai. Any Tender not accompanied by Earnest Money in an acceptable form shall be rejected by the Employer as non-responsive.

The Earnest Money of the successful Tenderer will be taken as part of the Security Deposit as stipulated in Clause 1A of "General conditions of Contract".

The Earnest Money will be forfeited to an extent of 50%, if during the period of Tender Validity, the tenderer

(a) Withdraws his Tender

or

(b) Makes any modifications in the terms and conditions of the Tender which are not acceptable to the Employer.

The Earnest Money will be forfeited in full if the successful Tenderer.

(i) Fails to commence the work on 15th day after the date on which the Employer issues written order to commence the work/ handing over the site which ever is later.

10. ALTERNATIVE PROPOSALS BY THE TENDERERS

The Tenderers shall submit offers, which comply strictly with the requirements of the Tender Document. Alternatives or any modification shall render the Tender invalid.

11. AUTHORITY TO SIGN

- (a) If the Applicant is an individual, he should sign above his full type written name and current address.
- (b) If the Applicant is a proprietary firm, the Proprietor should sign above his full type written name and the full name of his firm with its current address.
- (c) If the Applicant is a firm in partnership, the Documents should be signed by all the Partners of the firm above their full type written names and current addresses. Alternatively the Documents should be signed by a Partner holding Power of Attorney for the firm and in this case a certified copy of the Power of Attorney should accompany the Documents. In both cases a certified copy of the Partnership Deed and current address of all the partners of the firms should be furnished.
- (d) If the Applicant is a limited Company, or a Corporation, the Documents shall be signed by a duly authorized person holding Power of Attorney for signing the Documents, accompanied by a copy of the Power of Attorney. The Applicant should also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary.

LATE TENDER

Any Tender received after the deadline prescribed will be returned unopened to the Tenderer.

NOTE ON GENERAL CONDITION OF CONTRACT AND SCHEDULES A TO F

- 1. The general condition of contract Clauses of Contract and Schedules A to F should be read in conjunction with Correction Slip (C.S.) issued by the DG (Works), CPWD, New Delhi up to till date.
- 2. Wherever the expression "The President of India" or "The Government" or "The CPWD" appears in the clauses it should be substituted by the expression "IITM" representing "Indian Institute of Technology Madras".
- 3. Wherever the expression "divisional Officer" appears in the Clauses, it should be substituted by the expression "Executive Engineer (Civil)".
- 4. "Engineer in Charge" means Executive Engineer (Civil), IITM, and the Engineer means the officer representing the Engineer-in-Charge of the Project.

SPECIAL CONDITIONS

- 1. No Materials shall be issued by the Department.
- 2. No plot rent shall be charged for materials stocked in the institute land during the course of construction with the prior approval the engineer provided all such materials are removed within one month after the works are completed.
- No labour camps shall be permitted in side the IIT campus. Workers should be made to confine themselves to the work areas and should not wander in to the near by areas / buildings/ forests.
- 4. If night work is required to be carried out to fulfill the agreed rate of progress all arrangement shall be made by the Contractor inclusive of lighting the area without any claim for extra rate. To the extent possible engaging women labour in the night shift should be avoided.
- 5. The works shall be carried as per C.P.W.D specifications with Addenda and Corrigenda issued up o the date of receipt of tender and as per best Engineering practice.
- 6 No variations from, additions to and omissions from in the items of work shall vitiate the contract. All such variations, additions, substitutions etc shall be decided as per the terms of the contract agreement.
- 7. Child Labour is strictly prohibited.
- 8. Water will be supplied by I.I.T Madras and the contractors will be charged @ 1.5% of the total value of work done.
- 9. Holes and chasis for water supply and drainage, etc, shall be provided as directed during progress of work without any claim for extra for finishing.
- 10. The work shall be carried out with least hindrance to the adjoining building and offices and the contractors will be responsible for any damages, caused to the existing fixtures, electric fitting, etc. in the course of execution and the contractor shall make good any such, damages without any claim for extra.
- 11. Access should be from the external side of the building using temporary stairs etc.
- 12. Any dispute arises out in the agreement, the legal jurisdiction will be at Chennai, Tamil Nadu, India only.

- 13. The debris / construction waste and other waste generated from the work spot should not be thrown inside the campus. All waste material should be taken out of the campus or should be dumped at a place earmarked by the Engineer in charge.
- 14. All construction material should be stored only at places earmarked by the engineer in charge. Material like cement, aggregate, steel etc should not be stored in buildings that are in use. If any material stored in unauthorized location the same shall got removed at the cost of contractor and necessary rent shall be levied for the area used for storage.
- 15. For Intercarting of various materials animal drawn vehicles are strictly prohibited.
- 16. Preparation of concrete, mortars in the roads, pavements, under the building bare floors is strictly prohibited.
- 17. While transporting the materials along the road, spillage of material should be avoided. If any spillage occurs the same should be got cleaned immediately.
- 18. No vegetation inside the campus should be damaged.
- 19. Drinking water requirement of the labour should be arranged by the contractor and they should be instruct not to misuse the facilities available in the various buildings.
- 20. All labour should be dressed properly attending to work wearing dhotis, lungies should be avoided.
- 21. The workmen shall wear suitable protection devices like mask, gloves, shoes etc,

Any violation of above will attract levy of compensation by the engineer in charge on the contractor.

INSURANCE TO BE TAKEN BY THE CONTRACTOR AND EMPLOYER TO BE INDEMNIFIED Third Party Insurance

Before commencing the execution of the Works, the contractor shall insure against the liability for any material or physical damage, loss or injury which may occur to any property or life including that of the Employer or to any person, including any employee of the Employer, by or arising out of the execution of the works or in the carrying out of the Contract. The cum insured will be for Rs. 5 lakhs,

Such insurance shall be effected with an insurer and in terms approved by the Employer. The Contractor shall, whenever required, produce before the Engineer-in-charge the policy or policies of insurance and the receipts of payment of the current premiums.

Workmen's Insurance

The Employer's shall not be liable for any payment in respect of any damages or compensation payable according to law in respect or in consequence of any accident or injury or loss of life to any workman or other person in the employment of the Contractor or any subcontractor, except an accident or injury resulting from any act or default of the Employer, his agents or servants. The Contractor shall insure against such liability with an insurer approved by the Employer for sum of the established norms during the entire period till completion of Period of Maintenance.

Recovery from the Contractor

Without prejudice for the other rights of the Employer against the Contractor in respect of such default, the Employer shall be entitled to deduct from any sums payable to the Contractor the amount of any damages, compensation costs, charges and other expenses paid by the Employer and which are payable by the Contractor under this clause.

Period of Policies

All the insurance covers mentioned above shall be kept alive during the complete period of the contract. Remedy on Contractor's Failure to Insure. If the Contractor shall fail to effect and keep in force the insurance referred to above, or any other insurance which he may be required to effect under the terms of the Contract, then and in any such case the Employer on advice of the Engineer-in-Charge may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any moneys due or which may become due to the Contractor, or recover the same as debt due from the Contractor.

Damage to Persons and Property – Employer to be Indemnify

The Contractor shall indemnify the Employer against all losses and claims in respect of injuries or damages to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto, except any compensation or damages for or with respect to:

- (a) The permanent use or occupation of land by the works or any part thereof.
- (b) The right of the Employer to execute the works or any part thereof on, over, under, in or through any land.
- (c) Injuries or damage to persons or property resulting from any act or neglect of the Employer, his agents, servants or other contractors, not being employed by the Contractor or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the contractor, his servants or agents, such part of the compensations as may be just and equitable having regard to the extent of the responsibility of the Employer, his servant or agent or other Contractors, for the damage or injury.

Signature of Contractor

Executive Engineer (Civil)

MEASUREMENT & PREPARATION OF BILL

14.1 Computerized Bill to be submitted by the Contractor

Conventional measurement book shall be replaced by a bound volume of computerized measurements to be furnished by the contractor, duly machine numbered for the pages, and with MB number given by the Institute. The pages of these measurements books shall be of A4 size. All these measurements books shall be serially numbered and a record of these computerized measurements book shall be maintained in a separate register. The same format as in existing measurement books shall be used for the computerized measurement books. The measurements shall be carried forward from the previous recorded measurement as per the existing procedure.

14.2 Mode of measurements

The measurements shall be recorded and entered in the computerized format in the first instance by the contractor and a hard copy shall be submitted to the Institute. All entries shall be made as per the existing procedure. This measurements shall then be 100% checked by the Junior Engineer/ Assistant Engineer, and test checked by the Asst. Executive Engineer and Executive Engineer (Civil) as per the existing procedure. If Junior Engineer is not available, then the Asst Executive Engineer shall perform 100% check of the measurements.

The contractor shall incorporate all such changes or corrections, as may be done during the checks / test checks, to his draft computerized measurements and submit the final computerized measurements in the form of a book, duly hard bound in red colour on the lines of the conventional measurements books now in use with its pages machine numbered. The Junior Engineer / Asst. Engineer, Assistant Executive Engineer, Executive Engineer (Civil) shall check the computerized measurements to ensure that all the changes or corrections made by them earlier in the draft measurements are correctly incorporated in the final measurements. This book shall be treated as computerized measurement.

The Junior Engineer/ Asst. Engineer, Assistant Executive Engineer and Executive Engineer shall record the necessary certificate for their checks and test checks as per the existing procedure in this computerized measurement books. The computerized measurements book shall be allotted a serial number as per the register of computerized measurement books maintained by IITM.

14.3 Cuttings / over writing/ insertions in the computerized measurements books are not allowed.

The computerized measurements books given by the contractor, duly bound, with its pages numbered, shall have no cutting or over writing. In case of any error, computerized misprints shall be canceled and the contractor shall re submit a fresh computerized measurements books. This should be done before submission of corresponding computerized billing. The contractor shall submit as many copies of computerized measurement books as may be required and as specified in the NIT / contract for the purpose of reference and recording the various office of the department.

14.4 Computerized bill to be submitted by the contractor

The contractor shall submit his running and final bill in a computerized form in the same format as the existing conventional bills with all the pages machine numbered and hard bound made and with all the entries as per the existing procedure. The contractor shall submit as many copies of the computerized bills as may be required for the purpose of reference and record. The bill shall be carried forward from the previous running account bill as per the existing procedure. The computerized bill may be processed as per the existing procedure.

Computerized bill to be submitted by the contractor

The contractor shall submit his running and final bill in a computerized form in the same format as the existing conventional bills with all the pages machine numbered and hard bound made and with all the entries as per the existing procedure. The contractor shall submit as many copies of the computerized bills as may required for the purpose of reference and record. The bill shall be carried forward from the previous running account bill as per the existing procedure. The computerized bill as may be processed as per the existing procedure.

LIST OF APPROVED MAKE / BRAND - Civil Works

SI.No	Material	Brand / Manufacturer name
1	Enamel paint	Asian / ICI Dulux / Berger
2	UPVC pipe	Waterflo / Finolex / Supreme / Prince
3	GI pipes	TATA / Appollo
4	GI fittings	R brand / Unique
5	CPVC pipes	Astral / Finolex / Ashirvad / Prince
6	PTMT ball cock	Prayag
7	Valves	Leader / Audco / Harrison

INDIAN INSTITUTE OF TECHNOLOGY MADRAS

Bill of Quantities

Name of work: "Annual Maintenance Contract for Plumbing works in Water Supply Sub-division for the year 2013-14."

Tender No : 99 / 2012-13 / Civil.

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
1		Attending the leaking GI pipes by replacing the old corroded specials with new specials including removing the pipes of suitable length and replacing the same pipe in earth including trenching and filling the same. (R- Brand / Unique)			
a)	30.00	25mm dia tee	each		
b)	200.00	25mm dia elbow / bare nipple / coupling	each		
c)	75.00	25mm dia plug	each		
d)	30.00	40mm dia tee	each		
e)	60.00	40mm dia elbow / bare nipple / coupling	each		
f)	40.00	40mm dia plug	each		
g)	50.00	50mm dia tee	each		
h)	200.00	50mm dia elbow / bare nipple / coupling	each		
j)	25.00	50mm dia plug	each		

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
2		Attending the leaking GI pipes by replacing the old corroded specials with new specials including removing the pipes of suitable length and replacing the same pipe in earth including trenching and filling the same. (R- Brand / Unique)			
a)	60.00	25mm dia pipe nipple (0.075 to 0.15m length)	each		
b)	50.00	25mm dia pipe nipple (0.20 to 0.30m length)	each		
c)	30.00	40mm dia pipe nipple (0.075 to 0.15m length)	each		
d)	30.00	40mm dia pipe nipple (0.20 to 0.30m length)	each		
e)	40.00	50mm dia pipe nipple (0.075 to 0.15m length)	each		
f)	30.00	50mm dia pipe nipple (0.20 to 0.30m length)	each		
3		Attending the leaking GI pipes by replacing the old corroded specials with G.I Reducer / Reducer Elbow / Reducer TEE including removing the pipes of suitable length and replacing the same pipe in earth including trenching and filling the same. (R- Brand / Unique)			
a)	30.00	50 × 40mm dia	each		
b)	30.00	50 x 25mm dia	each		
c)	30.00	40 × 25mm dia	each		
d)	30.00	25 × 20mm dia	each		

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
e)	30.00	50 x 40mm dia bush	each		
f)	30.00	50 x 25mm dia bush	each		
g)	30.00	40 x 25mm dia bush	each		
4		Dismantling G.I pipes (external work) including excavation and refilling trenches and taking out the pipe including stacking within 50m lead / returned to section store / office.			
a)	400.00	15mm to 40mm dia	Rm		
b)	300.00	above 40 mm dia	Rm		
5	150.00	Charges only for relaying old / new G.I pipes of 15mm to 50mm dia (excluding excavation and refilling) including fixing, cutting & threading, joining and other sundry materials such as elbows, bends, couplings, bare nipple etc. complete. (TATA / APOLLO)	Rm		
6	1200.00	Dismantling G.I pipes of dia 15 to 50mm (external work) excluding excavation and refilling the trenches and taking out the pipe including stacking within 50m lead / returned to section store / office.	Rm		
7		Providing and fixing 'B' class G.I pipes with specials and GI fittings including trenching and refilling external / outer work and whatever required including cutting the pipe (TATA / APOLLO) and confirming to ISI-1239 (Part-1) etc. complete.			
a)	450.00	25 mm dia	Rm		
b)	150.00	40 mm dia	Rm		
c)	300.00	50 mm dia	Rm		

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
8		Attending the leaking GI pipes by replacing the old corroded specials with new specials including removing the pipes of suitable length and replacing the same pipe in walls. (R- Brand / Unique)			
a)	30.00	25mm dia tee	each		
b)	200.00	25mm dia elbow / bare nipple / coupling	each		
c)	40.00	25mm dia plug	each		
d)	30.00	40mm dia tee	each		
e)	100.00	40mm dia elbow / bare nipple / coupling	each		
f)	40.00	40mm dia plug	each		
g)	30.00	50mm dia tee	each		
h)	200.00	50mm dia elbow / bare nipple / coupling	each		
j)	30.00	50mm dia plug	each		
k)	40.00	25mm dia tank nipple	each		
l)	25.00	40mm dia tank nipple	each		
m)	30.00	50mm dia tank nipple	each		

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
9		Attending the leaking GI pipes by replacing the old corroded specials with new specials including removing the pipes of suitable length and replacing the same pipe in walls. (R- Brand / Unique)			
a)	60.00	25mm dia pipe nipple (0.075 to 0.15m length)	each		
b)	50.00	25mm dia pipe nipple (0.20 to 0.30m length)	each		
c)	30.00	40mm dia pipe nipple (0.075 to 0.15m length)	each		
d)	30.00	40mm dia pipe nipple (0.20 to 0.30m length)	each		
e)	40.00	50mm dia pipe nipple (0.075 to 0.15m length)	each		
f)	30.00	50mm dia pipe nipple (0.20 to 0.30m length)	each		
10		Attending the leaking GI pipes by replacing the old corroded specials with G.I Reducer / Reducer Elbow / Reducer TEE including removing the pipes of suitable length and replacing the same pipe walls. (R- Brand / Unique)			
a)	30.00	50 × 40mm dia	each		
b)	30.00	50 x 25mm dia	each		
c)	30.00	40 x 25mm dia	each		
d)	30.00	25 × 20mm dia	each		

SI.No	o Qty Description of Item Unit Rate Rs. in words & fi		Rate Rs. in words & figures	Amount	
e)	30.00	50 x 40mm dia bush	each		
f)	30.00	50 x 25mm dia bush	each		
g)	30.00	40 x 25mm dia bush	each		
11	1000.00	Charges only for removing old G.I pipes of 15mm to 50mm dia from walls.	Rm		
12	300.00	Charges only for fixing G.I pipes of old / new 15mm to 50mm dia on walls including teak wood packing, clamps and screws including required sundry materials such as elbows, bends, couplings, bare nipple etc. complete.	Rm		
13		Providing and fixing 'B' class G.I pipes with specials and GI clamp including cutting and making good the walls for internal / outer work with special GI clamps / concealed / open whatever required including cutting the pipe and confirming to IS – 1239 (Part-1) etc. complete.			
a)	500.00	25 mm dia	Rm		
b)	150.00	40 mm dia	Rm		
c)	400.00	50 mm dia	Rm		
14		Painting G.I pipes and fittings with synthetic enamel white paint over a ready mixed priming coat, both of approved quality for new work.			
a)	1000.00	25 mm dia	Rm		
b)	250.00	40 mm dia	Rm		

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
c)	750.00	50 mm dia	Rm		
15		Providing and fixing G.I Union in G.I pipe including cutting and threading the pipe and making long screws etc., complete ISI Embosed (New work).			
a)	150.00	25 mm dia	each		
b)	25.00	40 mm dia	each		
c)	100.00	50 mm dia	each		
16		Providing and fixing gun metal gate valve with C.I wheel of approved quality (screwed end). ISI embosed. (R-Brand/ Audco)			
a)	75.00	25 mm dia	each		
b)	10.00	40 mm dia	each		
c)	50.00	50 mm dia	each		
17		Providing and fixing non-return vertical valve of approved quality (screwed end). ISI Embosed.			
a)	30.00	40mm dia	each		
b)	30.00	50 mm dia	each		
18	80.00	Labour charges for removing the corroded / leaking G.I pipe wall pieces embedded in wall / concrete and fixing the new piece neatly cementing, curing etc. complete.	each		

SI.No	Qty	Description of Item	Unit	
19	80.00	Charges for arresting scour line leakage at OH water tank including removing of corroded G.I. pipe and arresting leakage using water proof compound (approved brand) and new GI pipe of required length including cement packing etc.	each	
20	400.00	Labour charges for carefully removing the ball valve sets from the suction pipes during repairing of water tanks, providing temporary connections and during fixing of inlet pipes in tanks and fixing same after repair etc. complete.	each	
21		Supplying of Ball valve complete set (Prayag)		
a)	200.00	25mm dia	each	
b)	50.00	50mm dia	each	
22		Supplying of Chutki for ball valve set		
a)	200.00	25mm dia	each	
b)	50.00	50mm dia	each	
23	20000.00	Providing and placing on terrace (at all floors levels) polythene water storage tanks IS:12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and base support for tank etc., complete.	Litres	
24	30.00	Labour charges for transporting, shifting and carefully placing on terrace (at all floor levels) Polyethylene water storage tank of capacity 1000 to 2000 litre with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes etc., complete. (Tank and cover will be supplied by Dept. store).	each	

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
25	90.00	Providing and fixing Polyethylene water storage tank cover for tank capacity 1000 to 2000 litre with suitable locking arrangement etc. complete.	each		
26	150.00	Labour charges for carefully removing the water meter of dia 20mm to 50mm from the delivery pipes and fixing the same after service by cleaning / fixing new water meter etc. complete.	each		
27	30.00	Labour charges for cleaning / fixing 1no. of ferrule and spindle including earthwork excavation of size 2.0 x 0.65 x 1.00m and refilling the pit including bailing out water.	each		
28	15.00	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main of 25 mm nominal bore.	each		
29	30.00	Providing and fixing PTMT ball cock of approved quality, colour and make complete with Epoxy coated aluminum rod with L.P./ H.P.H.D plastic ball 25mm nominal size, 152 mm long, having weight not less than 440 gms.	each		
30	30.00	Providing and fixing PTMT ball cock of approved quality, colour and make complete with Epoxy coated aluminum rod with L.P./ H.P.H.D plastic ball (Prayag or equivalent) 50mm nominal size, 152 mm long, having weight not less than 1240 gms.	each		
31	200.00	Labour charges for removing 15 / 20 mm dia PVC pipes inside the bore well in vertical direction.	Rm		
32	200.00	Labour charges for removing 40 / 63 mm dia PVC pipes inside the bore well in vertical direction.	Rm		

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
33	200.00	Providing and laying 50mm dia UPVC Sch-40 pipes (waterflo/Finolex/Prince or equivalent) in vertical direction in bore well including fittings, roughening the end faces with emery sheet and heating the pipe to the required heat and jointing with PVC solution including cutting cost, emery sheet and PVC solution etc., complete.	Rm		
34	100.00	Providing and fixing 63mm dia, 6 kg / sqcm PVC pipes (Finolex or equivalent) in vertical direction in bore well including fitting, roughening the end faces with emery sheet and heating the pipe to the required heat and jointing with PVC solution including cutting cost, emery sheet and PVC solution etc., complete	Rm		
35	200.00	Labour charges for removing 40 / 63 mm dia PVC pipes inside the trenches excluding excavation and refilling the trenches	Rm		
36		Providing and laying UPVC Sch-40 pipes (waterflo/Finolex/Prince or equivalent) at inside trenches jointing with PVC solution including cutting cost, emery sheet and PVC solution etc., complete.(Earth work will be paid separately)			
a)	200.00	50mm dia	Rm		
b)	100.00	40mm dia	Rm		
c)	50.00	25mm dia	Rm		
37		Providing and laying UPVC Sch-40 pipes (waterflo/Finolex/Prince or equivalent) at walls jointing with PVC solution including cutting cost, emery sheet and PVC solution etc., complete.	Rm		
a)	200.00	50mm dia	Rm		

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
b)	100.00	40mm dia	Rm		
c)	50.00	25mm dia	Rm		
38		Supplying and fixing of UPVC Sch-40 pipe fittings (waterflo/Finolex/Prince or equivalent) at walls including jointing with PVC solution including cutting cost, emery sheet and PVC solution etc., complete.			
a)	30.00	25mm dia UPVC Elbow / Coupling	each		
b)	30.00	40mm dia UPVC Elbow / Coupling	each		
c)	30.00	50mm dia UPVC Elbow / Coupling	each		
d)	30.00	25mm dia UPVC TEE	each		
e)	30.00	40mm dia UPVC TEE	each		
f)	30.00	50mm dia UPVC TEE	each		
g)	30.00	25mm dia UPVC MTA / FTA	each		
h)	30.00	40mm dia UPVC MTA / FTA	each		
i)	30.00	50mm dia UPVC MTA / FTA	each		

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
j)	30.00	50 x 40mm dia UPVC Reducer / bush	each		
k)	30.00	50 x 25mm dia UPVC Reducer / bush	each		
I)	30.00	40 x 25mm dia UPVC Reducer / bush	each		
39		Providing and laying CPVC pipes (Ashirvad/ Waterflo/Finolex/Prince or equivalent) at inside trenches including jointing with PVC solution including cutting cost, emery sheet and PVC solution etc., complete .(Earth work will be paid separately)			
a)	200.00	50mm dia	Rm		
b)	100.00	40mm dia	Rm		
c)	50.00	25mm dia	Rm		
40		Providing and laying CPVC pipes (Ashirvad/ Waterflo/Finolex/Prince or equivalent) at inside trenches including jointing with PVC solution including cutting cost, emery sheet and PVC solution etc., complete.			
a)	200.00	50mm dia	Rm		
b)	100.00	40mm dia	Rm		
c)	50.00	25mm dia	Rm		

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
41		Supplying and fixing of UPVC Sch-40 pipe fittings (waterflo/Finolex/Prince or equivalent) at walls including jointing with PVC solution including cutting cost, emery sheet and PVC solution etc., complete.			
a)	30.00	25mm dia CPVC Elbow / Coupling	each		
b)	30.00	40mm dia CPVC Elbow / Coupling	each		
c)	30.00	50mm dia CPVC Elbow / Coupling	each		
d)	30.00	25mm dia CPVC TEE	each		
e)	30.00	40mm dia CPVC TEE	each		
f)	30.00	50mm dia CPVC TEE	each		
g)	30.00	25mm dia CPVC MTA / FTA	each		
h)	30.00	40mm dia CPVC MTA / FTA	each		
j)	30.00	50mm dia CPVC MTA / FTA	each		
k)	30.00	50 × 40mm dia CPVC Reducer / bush	each		
l)	30.00	50 x 25mm dia CPVC Reducer / bush	each		
m)	30.00	40 x 25mm dia CPVC Reducer / bush	each		

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
42	200.00	Providing temporary connection using UPVC pipes of various dia, fittings including dismantling the same after completion of work.	Rm		
43		Supplying and fixing of PVC tank nipple			
a)	40.00	25mm dia	each		
b)	25.00	40mm dia	each		
c)	30.00	50mm dia	each		
44	45.00	Earth work in excavation over areas (exceeding 30 cm in depth 1.5m in width as well as 10sqm on plan) including disposal of excavated earth lead upto 50m and lift upto 1.5m disposed earth to be levelled and neatly dressed all kinds of soil.	cum		
45	45.00	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth consolidating each deposited layer by ramming and watering lead upto 50m and lift upto 1.5m.	cum		

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
46		Charges for only conveying the motor pump set from the section in the site of work of well or pump room and removing the non-working pump set and fixing the working pump set and connection and test running the motor pump and attending leakages if any etc. complete and handing over the defective motor / pump set to section office stores. (The electrical connection given by Dept. from starter to motor)			
a)	30.00	0.5HP / 1HP / 2HP Single Phase Motors.	each		
b)	45.00	5HP / 7.5 HP / 10HP Three Phase Motors.	each		
47		Labour charges for fixing GI specials in the GI pipes by replacing the old corroded specials with new specials including removing the pipes of suitable length and replacing the same pipe in walls etc. complete. (The G.I specials will be supplied by IITM).			
a)	42.00	40mm dia G.I Bend	each		
b)	4.00	50mm dia G.I Bend	each		
c)	1.00	32mm dia G.I coupling	each		
d)	100.00	40mm dia G.I Bare nipple	each		

SI.No	Qty	Description of Item	Unit	Rate Rs. in words & figures	Amount
e)	107.00	40mm dia G.I coupling	each		
f)	2.00	40mm dia end plug	each		
g)	4.00	50 x 40mm dia Reducer Tee	each		
h)	54.00	40 x 20mm dia Reducer	each		
i)	2.00	40 x 15mm dia Reducer	each		
j)	7.00	40 x 25mm dia Reducer	each		
k)	4.00	40 x 25mm dia Reducer Elbow	each		
48	2.00	Labour charges for fixing water meter of 50mm dia in the existing GI pipe including removing the pipes of suitable length and replacing the same pipe in walls etc. complete. (The water meter will be supplied by IITM).	each		
	1			Total Amount in Rs.	

Total Amount in Rs.	(In words)	 	

Signature of the Contractor

Executive Engineer (Civil) i/c